DECLARATION UNDER 37 C.F.R. §1.132

Michele Ratté, one of the inventors in the presently pending application number 10/666,563, hereby provides the following declaration explaining and demonstrating differences between the technology taught by the presently pending patent application, as claimed within the claims and described in the detail description, and the cited O'Neill, et al. reference having patent number 4,073,777 (hereafter, O'Neill). This declaration is being provided in accordance with the suggestion of Examiner Jackson during an Examiner interview held on December 2, 2005.

The intension of this declaration is to show how use of the technology taught by the presently pending application number 10/666,563 differs from that taught by O'Neill, and how addition of a metal layer in accordance with the method taught by the presently pending patent application number 10/666,563 (hereinafter, "the '563 application"), as claimed in claim 1, provides results that are different from that taught by O'Neill. In fact, as shown below, test results by using the process taught by O'Neill are not acceptable.

1. Wherein I, Michele Ratté, have run two series of tests that are illustrated in Exhibits A through AD. The first series of tests, the steps and results of which are shown by Exhibits A through R, illustrate use of the method claimed in the '563 application (sample one), and use of the method taught by O'Neill with addition of a metal layer (sample two), wherein the methods are performed on a polyester taffeta substrate. The second series of tests, the steps and results of which are shown by Exhibits S through AD, illustrate use of the method claimed in the '563 application (sample three), and use of the method taught by O'Neill with addition of a metal layer (sample four), wherein the methods are performed on a Nylon textile substrate.

The First Series

2. Exhibit A is a picture illustrating a polyester taffeta substrate stretched on a frame, where the substrate will be used for the first and second samples mentioned above.
3. Exhibits B and C are pictures illustrating the polyester taffeta substrate of Exhibit A coated with a thin, uniform layer of wet photo-sensitive emulsion.
4. Exhibit D is a picture illustrating gold leaf (metal layer) that is to be applied in accordance with claim 1 of the '563 application (samples one and three). In addition, the gold leaf of Exhibit D is applied to dried emulsion, since O'Neill teaches a resulting dried emulsion, as will be illustrated hereafter (samples two and four).
5. Exhibit E is a picture illustrating the result of applying gold leaf (a metal layer) to the wet emulsion, in accordance with claim 1 of the '563 application (sample one). In addition, sample two of Exhibit E illustrates not applying a metal layer to the wet emulsion, in accordance with O'Neill.

6. Exhibit F is a picture illustrating a closer look at the result of applying gold leaf (a metal layer) to the wet emulsion, in accordance with the '563 application (sample one).
7. In accordance with the invention of claim 1 in the '563 application, the wet emulsion was then allowed to dry.
8. Exhibits G, H, and I are pictures illustrating sample one (the '563 application) and sample two (O'Neill with a metal layer), showing attempted application of the gold leaf (metal layer) to the dried emulsion of O'Neill. As illustrated by Exhibits G, H, and I, the gold leaf (metal layer) does not adhere to the dry emulsion (sample two). In fact, even with rubbing of the gold leaf (metal layer) on the dried emulsion, the gold leaf (metal layer) will not adhere to the dried emulsion. Alternatively, sample one, which was provided in accordance with claim 1 of the '563 application, shows the gold leaf (metal layer) adhered to the emulsion due to its previous application while the emulsion was wet.
9. To proceed with the tests, sample two provides the gold leaf being taped onto the surface of the dried emulsion, as is shown by Exhibits J and K.
10. Exhibits L and M are pictures illustrating application of a film positive stencil on top of sample one and sample two. With the film positive stencil located on top of sample one and sample two, sample one and sample two are exposed to ultraviolet light for an elongated period of time resulting in curing of the already dried emulsion. An example of application of the film positive stencil is provided by claim 11 of the '563 application.
11. Exhibits N and O are pictures illustrating removal of dried emulsion and gold leaf from the areas that were protected by the film positive stencil during curing. As shown by Exhibits N and O, since the gold leaf (metal layer) did not adhere to the dried emulsion (sample two), the removal process results in sample two only having a dried and cured emulsion pattern provided by the film positive stencil. Specifically, sample two does not contain gold leaf (a metal layer) due to the gold leaf (metal layer) not having adhered to the dried emulsion previously. This is further exemplified by Exhibits P, Q, and R, where: Exhibit Q illustrates sample one after the abovementioned removal; Exhibit R illustrates sample two after the abovementioned removal, and Exhibit P illustrates both samples one and two after the abovementioned removal.

The Second Series

12. Exhibit S is a picture illustrating a nylon substrate stretched on a frame, where the substrate will be used for the third and fourth samples mentioned above.
13. Exhibits T and U are pictures illustrating the nylon substrate of Exhibit S coated with a thin, uniform layer of wet photo-sensitive emulsion.
14. Exhibit D is a picture illustrating gold leaf (metal layer) that is to be applied in accordance with claim 1 of the '563 application (samples one and three). In addition, the gold leaf of Exhibit D is applied to dried emulsion, since O'Neill teaches a resulting dried emulsion, as will be illustrated hereafter (samples two and four).

15. Exhibit V is a picture illustrating the result of applying gold leaf (a metal layer) to the wet emulsion, in accordance with the '563 application (sample three). In addition, sample four of Exhibit V illustrates not applying a metal layer to the wet emulsion, in accordance with O'Neill.

16. In accordance with the invention of claim 1 in the '563 application, the wet emulsion was then allowed to dry.

17. Exhibit W is a picture illustrating sample three (the '563 application) and sample four (O'Neill with a metal layer), showing attempted application of the gold leaf (metal layer) to the dried emulsion of O'Neill. It should be noted that the gold leaf (metal layer) does not adhere to the dry emulsion (sample four). In fact, even with rubbing of the gold leaf (metal layer) on the dried emulsion, the gold leaf (metal layer) will not adhere to the dried emulsion. Alternatively, sample three, which was provided in accordance with claim 1 of the '563 application, shows the gold leaf (metal layer) adhered to the emulsion due to its previous application while the emulsion was wet.

18. To proceed with the tests, sample four provides the gold leaf being taped onto the surface of the dried emulsion, as is shown by Exhibit X.

19. Exhibit Y is a picture illustrating application of a film positive stencil on top of sample three and sample four. With the film positive stencil located on top of sample three and sample four, samples three and four are exposed to ultraviolet light for an elongated period of time resulting in curing of the already dried emulsion. An example of application of the film positive stencil is provided by claim 11 of the '563 application.

20. Exhibits Z and AA are pictures illustrating removal of dried emulsion and gold leaf from the areas that were protected by the film positive stencil during curing. As shown by Exhibits Z and AA, since the gold leaf (metal layer) did not adhere to the dried emulsion (sample four), the removal process results in sample four only having a dried and cured emulsion pattern provided by the film positive stencil. Specifically, sample four does not contain gold leaf (a metal layer) due to the gold leaf (metal layer) not having adhered to the dried emulsion previously. This is further exemplified by Exhibits AB, AC, and AD, where: Exhibit AB illustrates sample three after the abovementioned removal; Exhibit AC illustrates sample four after the abovementioned removal; and Exhibit AD illustrates both samples three and four after the abovementioned removal.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Michèle Ratté

12.15.05
Date